

## Anti-PEF1 Rabbit Monoclonal Antibody Catalog # ABO16376

### Specification

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#### Anti-PEF1 Rabbit Monoclonal Antibody - Product Information

Application	WB
Primary Accession	<a href="#">Q9UBV8</a>
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-PEF1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

#### Anti-PEF1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 553115

#### Other Names

Peflin, PEF protein with a long N-terminal hydrophobic domain, Penta-EF hand domain-containing protein 1 {ECO:0000312|HGNC:HGNC:30009}, PEF1 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=30009](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=30009)), ABP32

#### Calculated MW

30 kDa KDa

#### Application Details

WB 1:500-1:2000

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human PEF1

#### Purification

Affinity-chromatography

#### Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

#### Anti-PEF1 Rabbit Monoclonal Antibody - Protein Information

Name PEF1 ([HGNC:30009](#))

Synonyms ABP32

### Function

Calcium-binding protein that acts as an adapter that bridges unrelated proteins or stabilizes weak protein-protein complexes in response to calcium. Together with PDCD6, acts as a calcium-dependent adapter for the BCR(KLHL12) complex, a complex involved in endoplasmic reticulum (ER)-Golgi transport by regulating the size of COPII coats (PubMed:[27716508](http://www.uniprot.org/citations/27716508)). In response to cytosolic calcium increase, the heterodimer formed with PDCD6 interacts with, and bridges together the BCR(KLHL12) complex and SEC31 (SEC31A or SEC31B), promoting monoubiquitination of SEC31 and subsequent collagen export, which is required for neural crest specification (PubMed:[27716508](http://www.uniprot.org/citations/27716508)). Its role in the heterodimer formed with PDCD6 is however unclear: some evidence shows that PEF1 and PDCD6 work together and promote association between PDCD6 and SEC31 in presence of calcium (PubMed:[27716508](http://www.uniprot.org/citations/27716508)). Other reports show that PEF1 dissociates from PDCD6 in presence of calcium, and may act as a negative regulator of PDCD6 (PubMed:[11278427](http://www.uniprot.org/citations/11278427)). Also acts as a negative regulator of ER-Golgi transport; possibly by inhibiting interaction between PDCD6 and SEC31 (By similarity).

### Cellular Location

Cytoplasm. Endoplasmic reticulum {ECO:0000250|UniProtKB:Q641Z8}. Membrane; Peripheral membrane protein. Cytoplasmic vesicle, COPII-coated vesicle membrane; Peripheral membrane protein. Note=Membrane-associated in the presence of Ca(2+) (PubMed:11278427). Localizes to endoplasmic reticulum exit site (ERES) (By similarity). {ECO:0000250|UniProtKB:Q641Z8, ECO:0000269|PubMed:11278427}

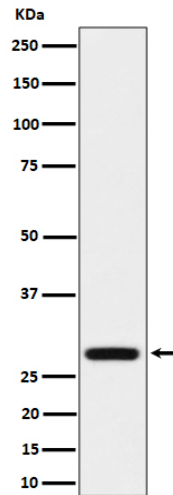
### Anti-PEF1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-PEF1 Rabbit Monoclonal Antibody - Images





Western blot analysis of PEF1 expression in HeLa cell lysate.